

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Interview

Examiners Fineman and Robinson are thanked for the courtesy extended during an interview at Examiner Fineman's office on August 19, 2003.

During the interview, it was agreed for the reasons described in more detail below that the additions to claim 8 that were presented in the last response did not constitute "new matter."

It was further agreed that the December 3, 2003 Official Action was erroneously designated as a "final" Office Action (since it was the first Official Action after an RCE amending the claims, and not indicated as final in the body of the Official Action).

No agreement was reached during the interview with respect to prior art of record, but Examiner Fineman agreed that she would reconsider the rejection in view of the amendments presented in the last response (subject to further searching as necessary).

Finally, a demonstration of the a commercial version of the invention was conducted by Mr. Gerard Sambets to show the relative simplicity and effectiveness of the invention relative to currently available stereoscopic systems.

2. Claim Objections

The objection to claims 11 and 12 has been addressed by amending claim 10 to positively recite—at least one video display screen— instead of "a video display," thereby providing antecedent support for the recitations in claims 11 and 12 (and in claim 10) of "said video display screen."

3. Rejection Under 35 USC §112, 1st Paragraph

This rejection is respectfully traversed on the grounds that the recitation of “limiting the field-of-view,” added in the last response, is not “new matter.”

Although “limiting the field-of-view” definitely has benefits” (because it eliminates ghosts), limitation of the field-of-view is more properly characterized as an inherent and immediately-recognizable property of the originally disclosed “common housing” structure illustrated in Fig. 3 of the application. Therefore, even though the previous Examiner was correct that “*There are no teachings in the specification or original claims as to the benefits or purpose of the housing,*” it is respectfully submitted that:

- (i) the lack of an explicit disclosure of benefits is not a proper grounds for a 1st Paragraph rejection so long as the benefits are inherent, and
- (ii) the Applicant has in any case not actually claimed a “benefit,” but rather has simply claimed an inherent structural and/or functional property of the originally disclosed structure.

As stated in MPEP §2163.07:

By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter. . . [citation omitted].

The test is whether, as also stated in MPEP §2163.07:

*. . .the missing descriptive matter is **necessarily present** in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.*

This is usually referred to as a test of whether the inventor was “in possession” of the invention, which in turn may, as described for example in MPEP §2163(II)(a)(3),

*. . .may be shown by a **clear depiction of the invention in detailed drawings** or in structural chemical formulas which permit a person skilled in the art to clearly recognize that applicant had possession of the claimed invention.*

It is respectfully submitted that, under the “necessarily present” or “possession” test, the addition of the “field of view” recitation does not constitute new matter, and that the currently amended claims are in compliance with 35 USC §112, 1st Paragraph.

Since the addition of the field-of-view limitation to the claims is not new matter, the **addition of a mentioned of field-of-view to the paragraph bridging pages 12 and 13 of the specification**, which is made for the purpose of providing proper antecedent support under 37 CFR §1.75(d)(1), also is not new matter.

Finally, it is noted that the term “fixed” is also not used in the original specification. However, it is respectfully submitted that fixing of components in a housing is an inherent and necessary aspect of such an arrangement since those skilled in the art would immediately recognize that if the components were not somehow fixed in the housing, and therefore with respect to each other, they would fall out of the housing or tumble around in the housing and the device would be useless.

4. Rejection of Claim 8 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,588,259 (Sheiman), 5,896,225 (Chikazawa) and 5,523,890 (Rainey)

This rejection is respectfully traversed on the grounds that none of the references applied by the Examiner discloses or suggests a stereoscopic effects device of the type disclosed in the Sheiman patent, in which the housing fixes the polarizing filters with respect to the other components of the device, *and* limits the field-of-view, thereby eliminating the ghost problem inherent in Sheiman’s system.

While it might in general be known to place different components in a common housing, it is not known in the context disclosed in the Sheiman patent. To the contrary, Sheiman in effect *teaches away* from decreasing the field-of-view by providing polarized filters fixed in a housing. As explained in col. 2, lines 26-31 of the Sheiman patent:

The system of this invention has distinct and clearly observable advantages over any other stereoscopic display system in that the original images can be seen in full-color, in any size, and by a multiplicity of observers from any angle of view and from any distance from the imaging source (Sheiman, col. 2, lines 26-31, emphasis added).

This statement suggests that a separate polarized filter arrangement, in the form of glasses worn by individual viewers, was considered to be an advantageous part of the system disclosed in the Sheiman patent.

This contrary teaching is not made up for by either the Chikazawa or Rainey patents. Instead, the Rainey patent discloses a magnifying arrangement that is strapped onto a video display screen, with no polarizing filters and therefore no suggestion that polarizing filters should be fixed in a housing, while the Chikazawa patent discloses a pixel-by-pixel image-separating display that is not analogous-to, and that cannot be used in the display of Sheiman.

Furthermore, it is respectfully submitted that the inclusion of the polarized filters, microprism sheet, and polarizers in the same housing as the display screen is not merely a matter of “design choice,” but rather makes the difference between practicality and inoperativeness. The reason that the inclusion of polarized filters in the housing is critical is that without the cropping or masking effect provided by the housing, left and right ghost images will be visible next to the main stereoscopic image. Due to the polarization, the right ghost image will only be visible to the right eye and the left ghost image will only be visible to the left eye, resulting in an arrangement that will literally give the user a headache. The invention of claim 8, in contrast, permits the ghost images to be eliminated by the field-of-view limiting effect of the housing. It is respectfully submitted that if it were obvious to modify the Sheiman device to include polarized filters in a common housing with the polarizers, microprism sheet, and display screen, then Sheiman would not have used glasses since, in practice, a Sheiman-type system that relies on glasses suffers from ghost images. As demonstrated during an interview with a previous Examiner, these ghost images are

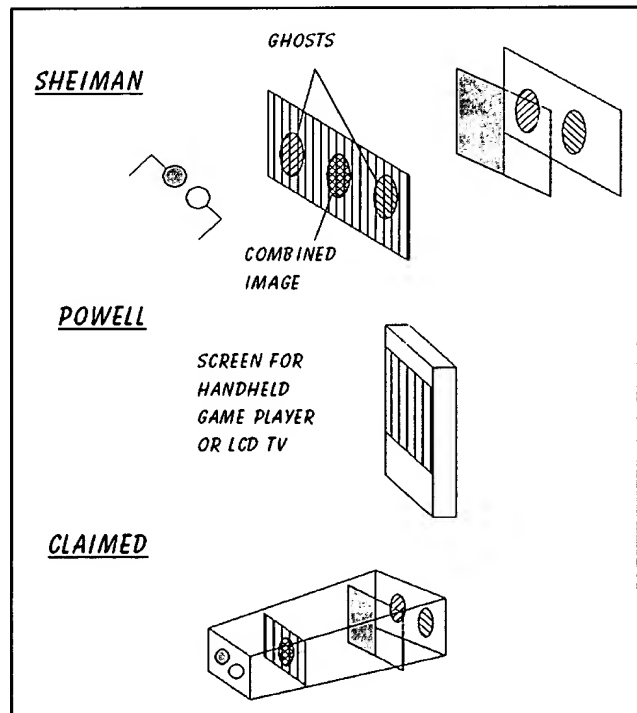
highly visible and are situated sufficiently close to the main image as to constitute a significant distraction.

Since Sheiman effectively *teaches away* from the claimed arrangement in which the field of view is limited by including the polarized filters in a housing, rather than in eyeglasses, and since none of the other references of record contradicts Sheiman's suggestion that non-fixed polarized filters are required, it is respectfully submitted that the rejection of amended claim 8 is improper and should be withdrawn.

3. Rejection of Claims 10-12 Under 35 USC §103(a) in view of U.S. Patent Nos. 4,588,259 (Sheiman), 5,896,225 (Chikazawa), 5,523,890 (Rainey), and 5,483,254 (Powell)

This rejection is also respectfully traversed on the grounds that none of the references applied by the Examiner discloses or suggests a stereoscopic effects device of the type disclosed by Sheiman, in which the housing fixes the polarizing filters with respect to the other components of the device, *and* limits the field-of-view.

The Sheiman and Powell patents applied against claims 10-12 are shown in the accompanying illustration (Chikazawa and Rainey are discussed above). While the Sheiman patent discloses the use of what is effectively a microp prism image combiner, thereby permitting the use of a simple sheet polarizer for each side-by-side image, Sheiman uses separate components, and in particular separate polarized filters, and therefore the system disclosed by



Comparison of Sheiman, Powell, and Claimed Invention

Sheiman is essentially unworkable due to the above-mentioned problem of ghost images. The arrangement disclosed by Powell, on the other hand, adds nothing to the system of Sheiman since it merely involves an image enhancing screen applied to a handheld game player or television. To the contrary, whereas the present invention fixes the polarized filters with respect to the other components, by including them in the claimed housing, thereby *limiting* the field of view (with the effect of eliminating the ghosts that plague the Sheiman system), both Sheiman and Powell seek to *increase* the field of view for their respective systems or devices. As explained in col. 2, lines 46-49 of the Powell patent:

. . . a significant problem with LCDs is that they can only be seen clearly from limited viewing angles because of the light collimating property of the liquid crystals.

Thus, the Powell patent, like the Sheiman patent, effectively teaches away from a field-of-view limited arrangement, as claimed, since it is directed to structures that *increase* the field-of-view of an LCD display. Increasing the field-of-view might be advantageous in the context of gameboy type portable video games as disclosed by Powell, but it turns out to be disadvantageous in the context of the Sheiman system—a fact that Sheiman apparently failed to recognize—due to the ghost image problem. A housing of the type claimed (as opposed to Powell's housing, which is behind the LCD display screen), would render the field-of-view increasing structures of Powell superfluous.

Because the Chikazawa, Rainey, and Powell patents all fail to disclose or suggest modification of a system of the type disclosed in the Sheiman patent to house the respective components of the Sheiman system, and in particular the polarized filters, in a common housing, as recited in claim 8 as well as claims 10-12 dependent therefrom, withdrawal of the rejection of claims 10-12 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

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Should the Examiner nevertheless feel that issues remain that could possibly be resolved in an interview, the Examiner is invited to telephone the undersigned at any time to arranged such an interview.

Respectfully submitted,

BACON & THOMAS, PLLC

A handwritten signature in black ink, appearing to read 'Bj' followed by a stylized flourish.

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